

NIH GPRA RESEARCH PROGRAM OUTCOMES

FY99 ASSESSMENT MATERIAL

Introduction

The following examples of outcomes from NIH-supported research were prepared by the NIH for the purpose of responding to the Government Performance and Results Act (GPRA). As part of its approach to the GPRA, the NIH developed an independent assessment process for evaluating the outcomes resulting from its Research Program, comparing these outcomes with the performance goals for the Research Program, and reporting on the status of NIH achievement of the qualitative performance goals.*

In the broadest of terms, the assessment involved gauging the extent to which NIH's stewardship of the medical research enterprise leads to important discoveries, knowledge, and techniques that are applied to the development of new diagnostics, treatments, and preventive measures to improve health and health-related quality of life.

Assessment Material

The assessment material consisted of four types of narratives, that together provide an extensive but by no means exhaustive illustration of NIH's FY99 research outcomes that address the five qualitative Research Program performance goals:

- \$ ***Science Advances*** describe a specific scientific discovery published within the past year and supported by NIH funding, place it in the larger context of what is known and unknown, and describe the significance of the finding to science, health, and/or the economy. Science advances are one-page narratives that contain a descriptive title, a background section, a description of the advance, a discussion of the significance or implications of the advance, and citations of the scientific publications that support the advance.
- \$ ***Science Capsules*** provide a snapshot of the breadth and scope of NIH Research Program outcomes. There are obvious limitations to the sheer number of detailed, one-page science advances that the Working Group members could be expected to review and assimilate. Science capsules are the ACLIFF notes® version of science advances, consisting of a short paragraph that succinctly captures an advance and its significance, as well as citations.
- \$ ***Stories of Discovery*** address the major limitation of traditional science advances—the fact that they address a single, incremental finding. Biomedical progress is usually achieved through long-range investments in research; advances usually occur slowly and incrementally, often build upon one another, and sometimes have applications to seemingly unrelated areas of medicine. Stories of discovery are 1-2 page narratives that focus on one topic. Each story traces the major developments in that area over several decades. Important connections between advances in science and improvements in the quality of life, health, and health care, as well as any resulting economic benefits are also highlighted.

NIH GPRA Research Program Outcomes

\$ **Research Awards/honors** demonstrate outside evaluation and recognition of the value of NIH Research Program outcomes. The award write-ups are brief descriptions of national and international scientific awards/honors received by NIH scientists and grantees within FY99. The brief narratives identify the researcher(s) and the award, describe the work being honored, and the significance/purpose of the award.

The narratives are organized under NIH's five qualitative GPRA Research Program goals, followed by the examples of awards/honors.

* NIH identified a number of goals related to its Research Program. Of these, seven are directly related to the conduct of research:

- \$ Add to the body of knowledge about normal and abnormal biological functions and behavior.
- \$ Develop new or improved instruments and technologies for use in research and medicine.
- \$ Develop new or improved approaches for preventing or delaying the onset or progression of disease and disability.
- \$ Develop new or improved methods for diagnosing disease and disability.
- \$ Develop new or improved approaches for treating disease and disability.
- \$ Work towards the President's goal of developing an AIDS vaccine by 2007.
- \$ Develop critical genomic resources, including the DNA sequences of the human genome and the genomes of important model organisms and disease-causing microorganisms.

Because the evidence for having met the first five goals was qualitative in nature, it was subject to an independent assessment. NIH identified specific quantitative targets for the last two goals (AIDS vaccine, genomic resources) and thus they were not included in the independent assessment process.